



WASHING MACHINE SERVICE MANUAL

CAUTION

READ THIS MANUAL CAREFULLY TO DIAGNOSE TROUBLES
CORRECTLY BEFORE OFFERING SERVICE.

**MODEL : WD(M)-1244(0~9)FD(S,M)
WD(M)-1444(0~9)FD(S,M)
WD(M)-1644(0~9)FD(S,M)**

CONTENTS

1. SPECIFICATION.....	3
2. FEATURES & TECHNICAL EXPLANATION	4
3. PARTS IDENTIFICATION	6
4. INSTALLATION.....	7
5. OPERATION	10
6. WIRING DIAGRAM / PROGRAM CHART	12
7. TROUBLE SHOOTING.....	13
7-1.BEFORE SVC CHECKING	13
7-2.QC TEST MODE.....	13
7-3.HOW TO KNOW THE WATER LEVEL FREQUENCY.....	13
7-4.HOW TO KNOW TO TEMPERATURE OF EACH THERMISTOR AT OPERATING CONDITION.....	13
7-5.ERROR DISPLAY	14
8. ERROR DIAGNOSIS AND CHECK LIST	16
8-1. DIAGNOSIS AND ANSWER FOR ABNORMAL OPERATION	16
8-2. FAULT DIAGNOSIS AND TROUBLE SHOOTING	19
9. DISASSEMBLY INSTRUCTIONS	25
10. EXPLODED VIEW AND PARTS LIST	33
10-1. THE EXPLODED VIEW OF CABINET ASSEMBLY	33
10-2. THE EXPLODED VIEW OF CONTROL PANEL AND DISPENSER ASSEMBLY	34
10-3. THE EXPLODED VIEW OF DRUM AND TUB ASSEMBLY	35

1. SPECIFICATION

ITEM		WD(M)-1644(0~9)FD(S,M) WD(M)-1444(0~9)FD(S,M)		WD(M)-1244(0~9)FD(S,M)	
POWER SUPPLY		220V-240V~, 50Hz			
PRODUCT WEIGHT		64kg			
ELECTRICITY CONSUMPTION	WASHING	140W			
	SPIN	440W			
	DRAIN MOTOR	40W			
	STEAM HEATER	1100W			
	WASH HEATER	2000W			
REVOLUTION SPEED	WASH	50rpm			
	SPIN	WD(M)-1644(0~9)FD(S,M)	No Spin/400/600/800/1000/1200/1600		
		WD(M)-1444(0~9)FD(S,M)	No Spin/400/600/800/1000/1200/1400		
		WD(M)-1244(0~9)FD(S,M)	No Spin/400/600/800/1000/1100/1200		
OPERATION WATER PRESSURE		0.3-10kgf/cm² (30-1000kPa)			
CONTROL TYPE		Electronic			
WASH CAPACITY		8kg			
DIMENSION		600mm(W)x640mm(D)x850mm(H)			
WASH PROGRAM		Cotton, Synthetic, Delicate, Hand Wash/Wool, Duvet, Quick30, Rinse+Spin, Refresh, Baby Care			
RINSE		Normal, Rinse+, Rinse++, Rinse+Hold			
DOOR SWITCH TYPE		Bi-Metal type			
WATER LEVEL		10 steps (by sensor)			
RESERVATION		From 3 hours to 19 hours			
SENSING OF THE LAUNDRY AMOUNT		Adapted			
FUZZY LOGIC		Adapted			
DISPLAY OF THE REMAINING TIME		Adapted			
ERROR DIAGNOSIS		10 items			
POWER AUTO OFF		Adapted			
CHILD LOCK		Adapted			
AUTO RESTART		Adapted			
TIME SAVE		Adapted			

2. FEATURES & TECHNICAL EXPLANATION

2-1.FEATURES



■ **Direct Drive System**

The advanced Brushless DC motor directly drives the drum without belt and pulley.



■ **Water Circulation**

Spray detergent solution and water over the load over continu. Clothes are soaked more quickly and thoroughly during wash cycle. The detergent suds can be removed more easily by the water shower during rinse cycle. The water circulation system uses both water and detergent more efficiently.



■ **Built-in Heater**

Internal heater automatically heats the water to the best temperature on selected cycles.



■ **Child Lock**

The Child lock prevents children from pressing any button to change the settings during operation.



■ **More economical by Intelligent Wash System**

Intelligent Wash System detects the amount of load and water temperature, and then determines the optimum water level and washing time to minimize energy and water consumption.



■ **Low noise speed control system**

By sensing the amount of load and balance, it evenly distributes load to minimize the spinning noise level.



■ **Safety device (Aqua lock)**

Aqua lock System is designed for detecting water leak during operation to prevent water from spilling on the floor.



■ **Using the RLM (Remote Laundry Monitor)**

The RLM monitors status of your washer and/or dryer. You can plug the display unit into any power outlet in your home.

* The RLM Display Unit can be purchased separately for this washer.

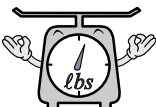
* [WD(M)-***** (0~9)FDM]



■ **Steam Washing and Refresh**

Steam Washing features upgraded washing performance with low energy consumption. Refresh cycle reduces wrinkles from dry clothes.

* [WD(M)-***** (0~9)FDS]

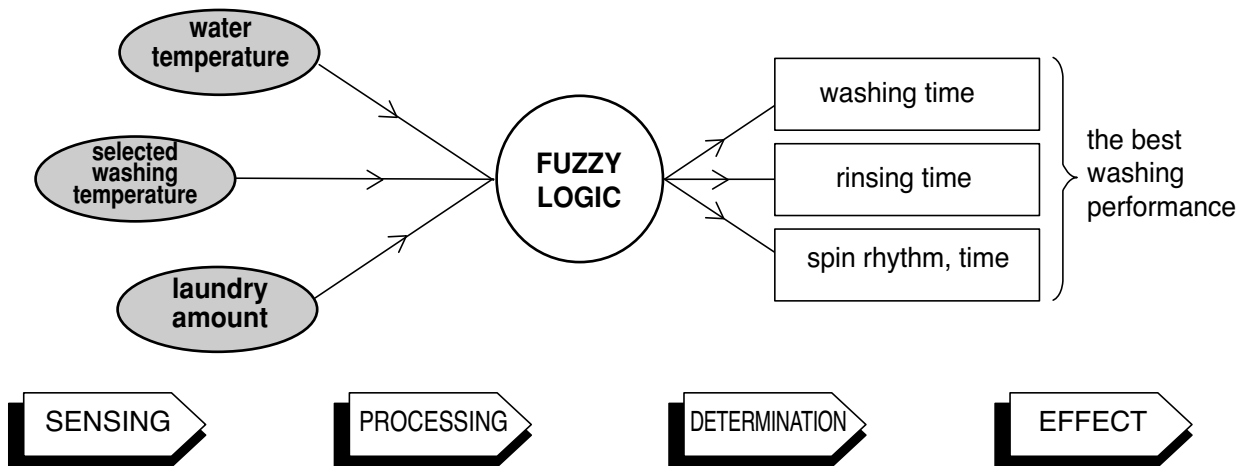


■ **Automatic Wash Load Detection**

Automatically detects the load and optimizes the washing time.

2-2.DETERMINE WASHING TIME BY FUZZY LOGIC

To get the best washing performance optimal time is determined by sensing of water temperature, selected washing temperature and laundry amount.



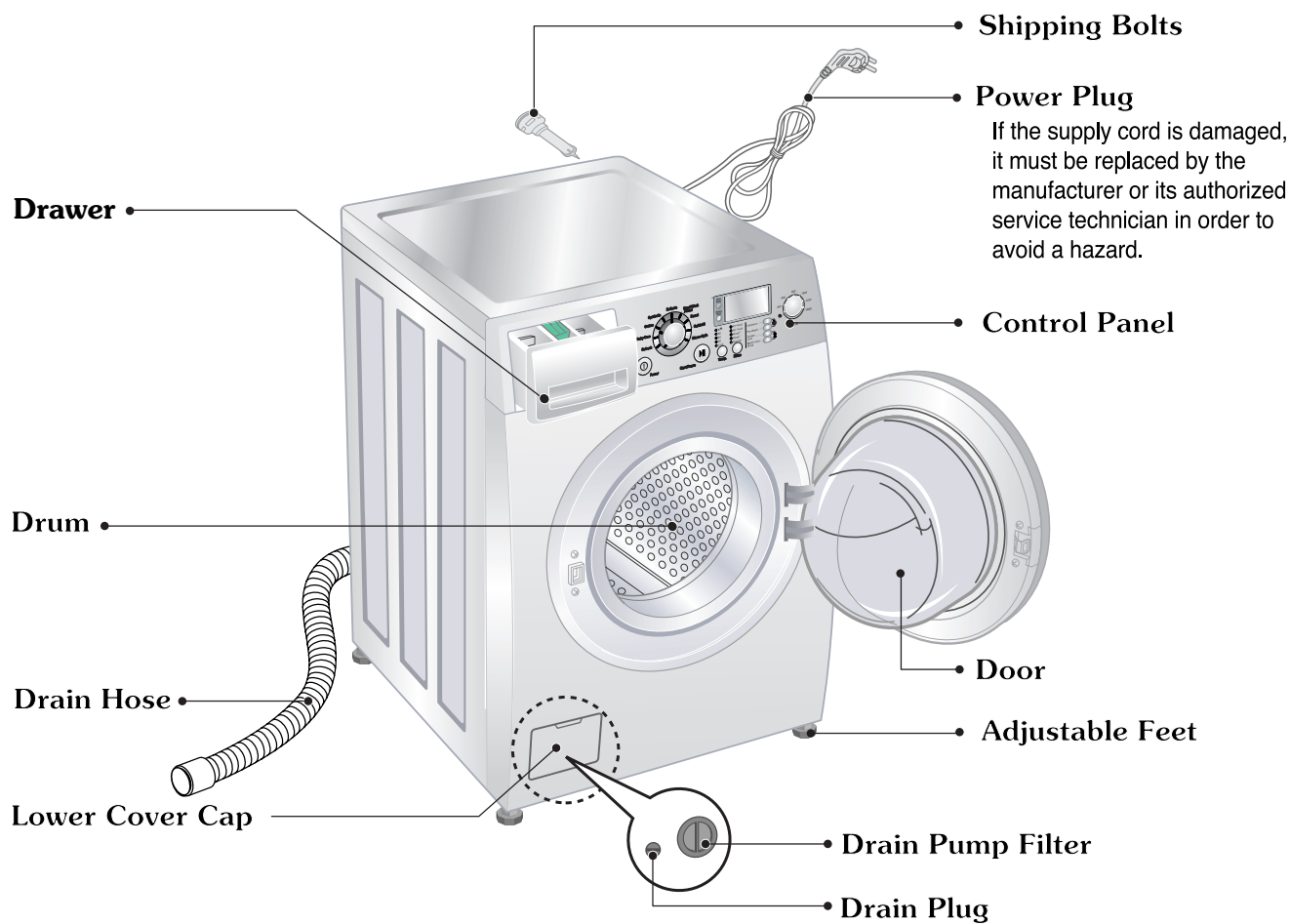
2-3.WATER LEVEL CONTROL

- This model adopts a pressure sensor which can sense the water level in the tub.
- Water supply is stopped when the water level to the preset level, then washing program proceeds.
- Spinning does not proceed until the water in the tub reduces to a certain level.

2-4.THE DOOR CAN NOT BE OPENED

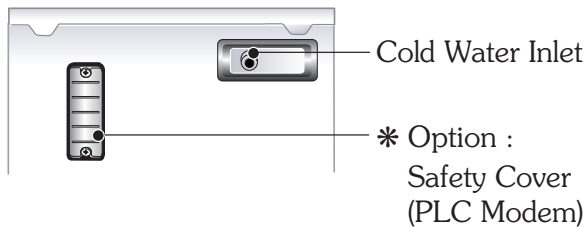
- While program is operating.
- While **Door Lock** light turns on.

3. PARTS IDENTIFICATION

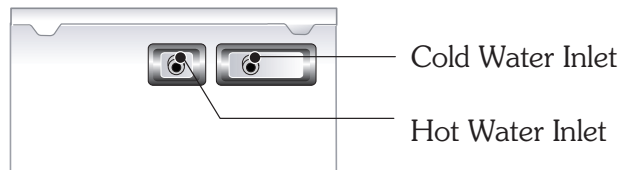


Back of Washer

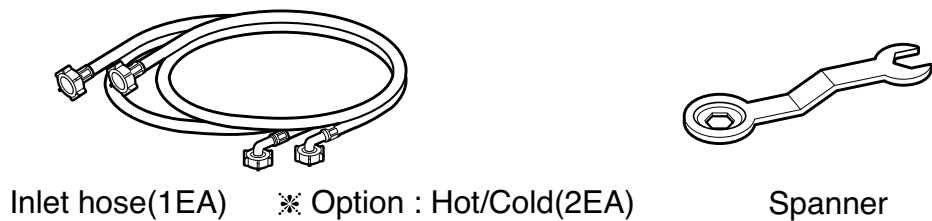
* Cold Only



* Hot/Cold



ACCESSORIES

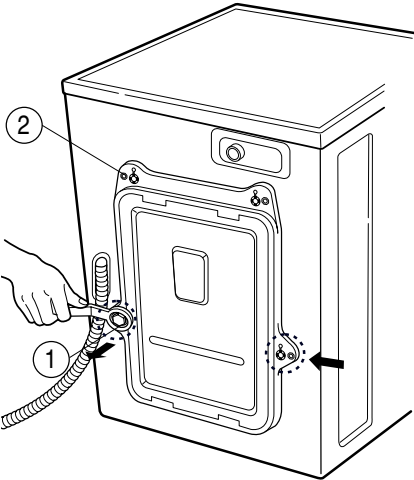
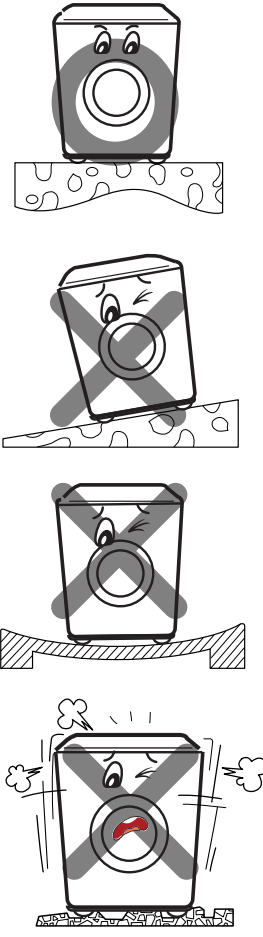



4. INSTALLATION

- ❶ Before servicing ask the customer what the trouble is.
- ❷ Check the adjustment(power supply is 220-240V~, remove the transit bolts....)
- ❸ Check the troubles referring to the trouble shooting.
- ❹ Decide service steps referring to disassembly instructions.
- ❺ And then, service and repair.
- ❻ After servicing, operate the appliance to see whether it works O·K or NOT.

■ STANDARD INSTALLATION

The appliance should be installed as follows.

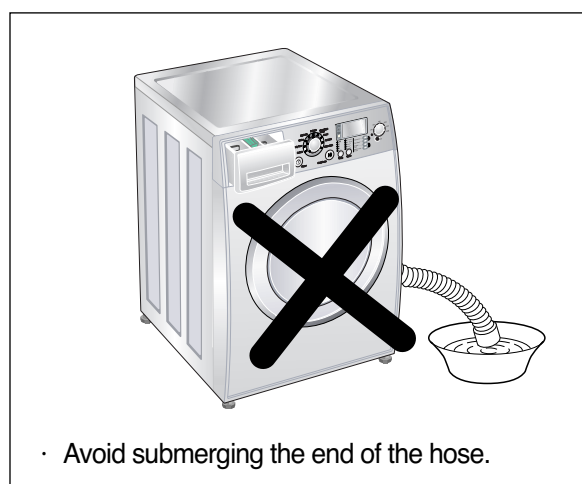
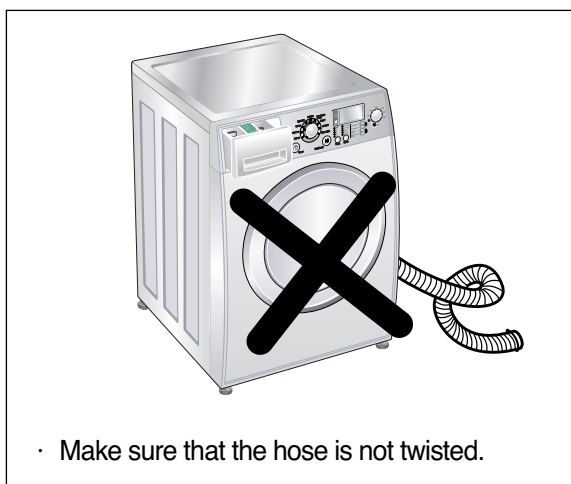
REMOVE THE TRANSIT BOLTS	INSTALL THE APPLIANCE ON FLAT AND FIRM SURFACE	ADJUST THE HORIZONTAL
<ul style="list-style-type: none"> Remove the transit bolts (4EA:❶) with supplied spanner. Keep the transit bolts and spanner for future use. Insert the provided 4 caps into the hole 		<ul style="list-style-type: none"> Turn the leveling feet to set the appliance horizontally.  <ul style="list-style-type: none"> The appliance goes up by rotating the feet clockwise. The appliance come down by rotating the feet counter clockwise.

■ HOW TO CONNECT INLET HOSE

- Check that the rubber packing is inside of the valve connector.
- Connect the inlet hose firmly to prevent leak.

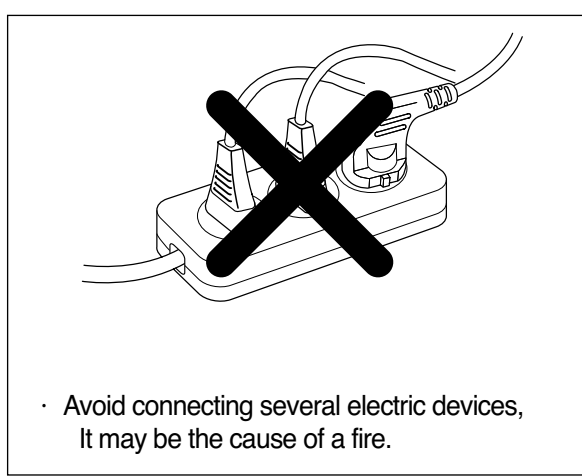
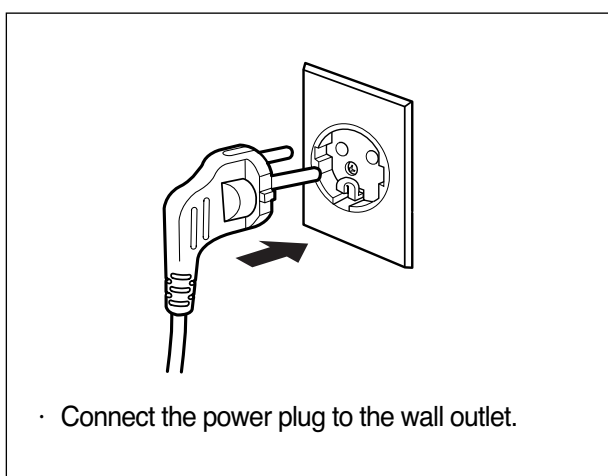


■ CONNECT DRAIN HOSE



※ The drain hose should be placed under 100cm from the floor.

■ CONNECT POWER PLUG



7 TEST OPERATION

1 Preparation for washing.



- Connect the power plug to the outlet.
- Connect the inlet hose.

2 Press the POWER button.



3 Press the Start/Pause button.



- In case of Coloreds program.

6 Check the water heating.



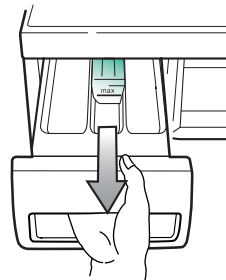
- Press the Rinse+Medic Rinse button simultaneously and the present temperature will be displayed.

5 Check automatic reverse turn.



- Check if the drum rotates clockwise and counterclockwise.

4 Check the water supply.



- Check if water is supplied through the detergent dispenser.

7 Check drain and spin

- Turn off Wash and Rinse after pressing the Start/Pause button and start the machine again.
- Check drain and spin.

8 Power off and open the door



- Power off and then power on.
- Check if the door can be opened after 3 minutes.

9 Water removal



- If SVC is needed during check, remove the remaining water by pulling out the hose cap.

5. OPERATION

Cycle Selector

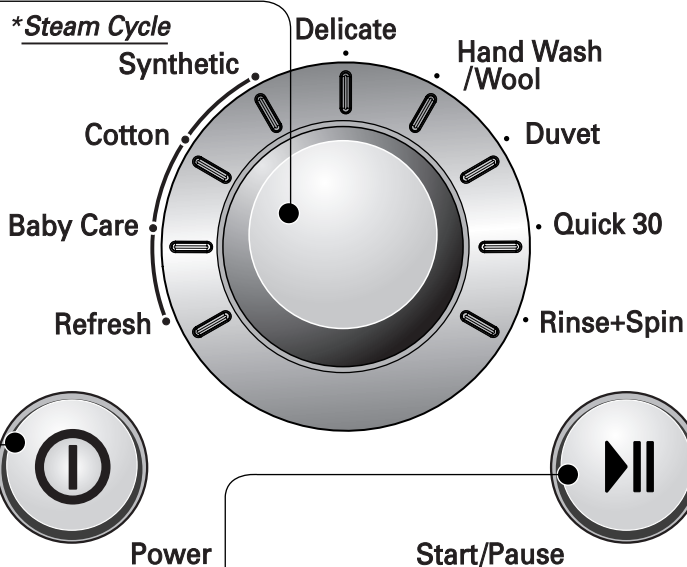
- Rotate the **Cycle selector knob** to select the cycle designed for different types of fabric and soil levels.

Time Delay

- Allows the start of any cycle to be delayed for 3~19 hours.

Power

- Use this button to turn the power **On/Off**.



- Display the estimated time to finish.
- In case of abnormal operation, error code is displayed.
(IE, OE, UE, dE, etc.)
- See troubleshooting guide for more details.

Start/Pause

- Use this button to Start/Stop the washer.

Steam Wash

- By pressing the Steam Wash button, Steam Function is selected, light on Steam Wash button LED

Rinse, Temp. Button

- Select a water temperature based on the type of load you are washing.
- By pressing the Rinse button, the Rinse type can be selected.

LED display

remaining time (Hour : Minute)

operation, error indications are

LE, FE, PE, LE, AE, PF)

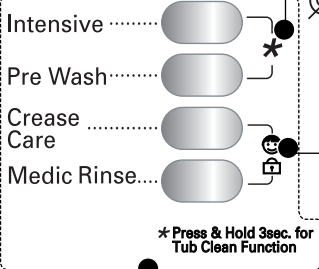
uide.



Rinse++ Hold
Normal+ Hold
Rinse++
Rinse+
Normal



Rinse

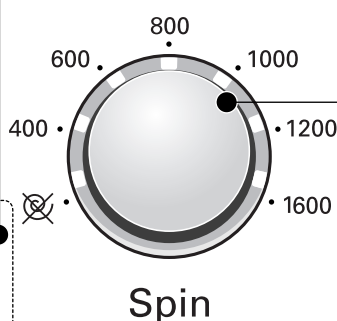


Tub Clean

- Tub Clean course can be set by pressing and holding Intensive and Pre Wash button simultaneously.
- Tub Clean is special cycle to clean the inside of the washer.

Spin Selector knob

- To change the spin speed, turn the Spin knob to cycle through available options.



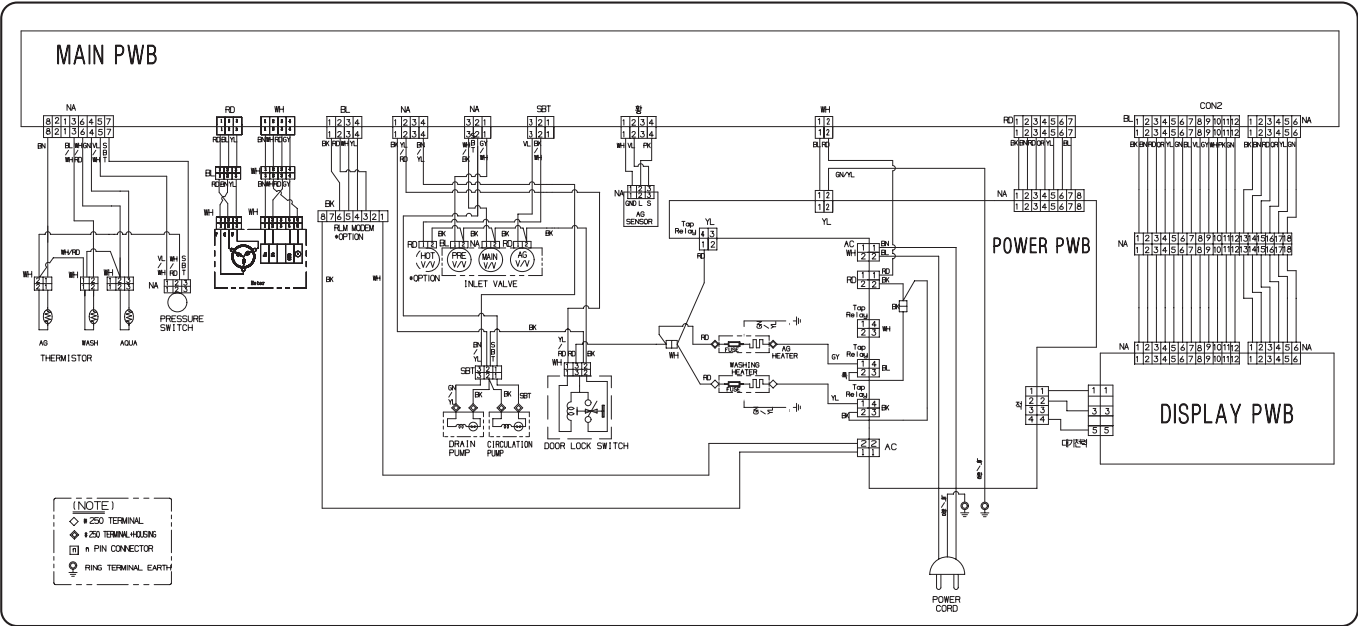
Child Lock

- Use this option to prevent unwanted use of the washer. Press and hold Crease Care and Medic Rinse button for 3 seconds to lock/unlock control.
- When Child lock is set, CHILD LOCK lights and all buttons are disabled except the Power (⏻) button. You can lock the washer while it is operating.

Option Button

- **Intensive** : If the laundry is heavily soiled "Intensive" option is effective.
By selecting the Intensive option, the wash time may be extended, depending on the program selected.
- **Pre Wash** : Use this option for load that need pretreatment. Add 16 minutes pre wash and drain.
- **Crease Care** : If you want to prevent crease, select this button with spin speed.
- **Medic Rinse** : For high effectiveness or more purity in rinse operation you can choose Medic Rinse option. It can be chosen in all course with the exception of Hand Wash/Wool, Delicate, Quick 30, Duvet, Refresh.

6. WIRING DIAGRAM / PROGRAM CHART



PRGRAM CHART
* Water Supply : W·S * Intermittent Spin : I·S * Disentangle : D·T

COURSE STEP TIME (SEC.)	Wash								Rinse																Spin				E N D	A U T O O F F	**Approx Working Time (Minute)
	Pre				Main				1				2				3				Extra & Stain(4-6)										
	W / S	Wash	Drain	I / S	W / S	Wash			Drain	I / S	W / S	Rinse	Drain	I / S	W / S	Rinse	Drain	I / S	W / S	Rinse	Drain	I / S	W / S	Rinse	Drain	Spin	D / T				
						Heat	Steam	Wash																							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29			
60	(--)	60	180	120			(--)	60	180	120	180	60	180	120	180	60	180	120	180	60	180	120	180	60	480	180	20	20			
Cotton		8					12																						114(111)		
Synthetic		8					42																						84		
Delicate							42																						72		
Hand Wash /Wool		8																											62		
Duvet																													72		
Quick 30							12																						30		
Rinse+Spin																													26(23)		
Refresh																													19		
Baby Care		8																											155		
Wash		8					12																						68		
Spin							42																						20		

* Basic Cycle
* Optional Cycle
* Pre-Setting Time : Water Supply - 120 sec.
Drain - 60 sec.

* Wash time is in minutes.
** The total working time will vary with the load size, water temperature and ambient temperature.

7. TROUBLE SHOOTING

7-1.BEFORE SVC CHECKING

- Be careful of electric shock or disconnecting the parts while trouble shooting.
- Voltage of each terminal in 220-240V~ and DC while applying an electric current.

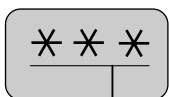
7-2.QC TEST MODE.

- ① Pressing Rinse and Steam Wash button simultaneously.
- ② Press the Power (Ⓢ) button, while the above condition.
- ③ Press the Start/Pause button as follows.

Number of times the Start/Pause button is pressed	Check Point	Display Status
None	Turns on all lamps and locks the door.	
1 time	Tumble clockwise.	rpm (42~50)
2 times	Low speed Spin.	rpm (55~65)
3 times	High speed Spin.	rpm (125~155)
4 times	Inlet valve for prewash turns on.	Water level frequency (25~65)
5 times	Inlet valve for main wash turns on.	Water level frequency (25~65)
6 times	Inlet valve for hot water turns on.	Water level frequency (25~65)
7 times	Inlet valve for steam turns on.	Water level frequency (25~65)
8 times	Inlet valve for bleach turns on.	Water level frequency (25~65)
9 times	Tumble counterclockwise.	rpm (42~50)
10 times	Heater turns on for 3 sec.	Water temperature
11 times	Circulation pump turns on.	Water level frequency (25~65)
12 times	Drain pump turns on.	Water level frequency (25~65)
13 times	Water level Sensor for Steam	Water level frequency of TSG(0~255)
14 times	Steam Heater turns on for 1.2 sec.	TSG temperature
15 times	Off	-

7-4.HOW TO KNOW THE WATER LEVEL FREQUENCY

* Press the **Temp.** and **Spin** button simultaneously.





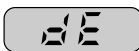

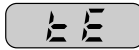






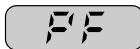
The digits means water level frequency (10^{-1} kHz)

ex) 241 : Water level frequency = 241×10^{-1} kHz
=24.1kHz

7-5.ERROR DISPLAY.

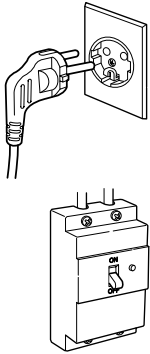


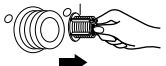
- If you press the Start/Pause button in error condition, any error except 'PE' will disappear and the machine will change into pause status.
- In case of 『PE』, 『LE』, if the error is not resolved within 20 sec., and in case of other errors, if the error is not resolved within 4 min., power will be turned off automatically and the error only will be blinked. But in case of 『FE』, power will not be turned off.






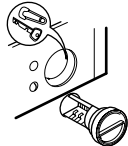


	ERROR	SYMPTOM	CAUSE
1	WATER INLET ERROR		<ul style="list-style-type: none"> • Not reached to the water level(246)within 8 minutes after water supplied or not reached to the preset water level within 25 minutes.
2	DRAIN ERROR		<ul style="list-style-type: none"> • Not fully drained within 10 minutes.
3	OVERFLOW ERROR		<ul style="list-style-type: none"> • Water is over flowing(over 8 level). ※ If "FE" is displayed, drain pump operates to drain water automatically.
4	SENSOR PRESSURE S/W ERROR		<ul style="list-style-type: none"> • The sensor pressure switch is out of order.
5	DOOR OPEN ERROR		<ul style="list-style-type: none"> • In case of operating the reservation function or the other function with door opened. Close the door, then the error display is resolved. • The door switch is out of order.
6	IMBALANCE ERROR		<ul style="list-style-type: none"> • The appliance is tilted. • Laundry is gathered to one side.
7	HEATING ERROR		<ul style="list-style-type: none"> • The THERMISTOR is out of order.

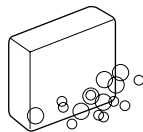
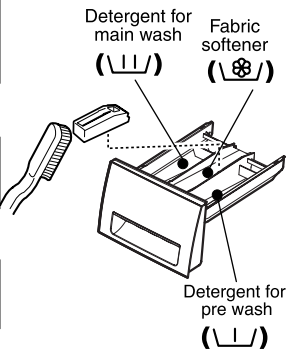
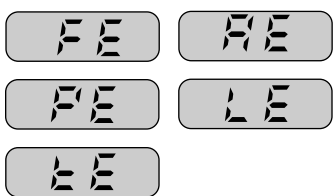
	ERROR	SYMPTOM	CAUSE
8	LOCKED MOTOR ERROR		<ul style="list-style-type: none"> • The connector in the LEAD WIRE ASSEMBLY is not connected to the connector of STATOR ASSEMBLY  Reconnect or repair the connector • The hall sensor is out of order/defective.  Replace the STATOR ASSEMBLY
9			<ul style="list-style-type: none"> • Water leaks
10	POWER FAILURE		<ul style="list-style-type: none"> • The washer experienced a power failure

8. ERROR DIAGNOSIS AND CHECK LIST

8-1.DIAGNOSIS AND ANSWER FOR ABNORMAL OPERATION

SYMPTOM	GUIDE FOR SERVICE CALL
<p>NO POWER</p>	<div data-bbox="502 476 1064 843"> <p>Is the power plug connected firmly to 220-240V~ outlet?</p> <p>YES</p> <p>Power failure? or Breaker opened?</p> <p>NO</p> <p>Visit to check</p> </div> <div data-bbox="1139 467 1289 821">  </div>
<p>WATER INLET TROUBLE</p> <div data-bbox="196 1022 338 1065">  </div>	<div data-bbox="502 950 1064 1771"> <p>Is " IE " displayed?</p> <p>YES</p> <p>Is the tap opened?</p> <p>YES</p> <p>Is the tap frozen?</p> <p>NO</p> <p>Is the water supply shut-off?</p> <p>NO</p> <p>Is filter in the inlet valve clogged with foreign material?</p> <p>YES</p> <p>NO</p> <p>Visit to check</p> </div> <div data-bbox="1139 1074 1369 1659">  <div data-bbox="1139 1456 1369 1659"> <p>Clean the filter of inlet valve</p>  </div> </div>

SYMPTOM	GUIDE FOR SERVICE CALL
<ul style="list-style-type: none"> • DOOR DOES NOT OPEN • ERROR DISPLAYED ON THE PROGRAM 	<div data-bbox="499 380 1145 467"> <p>Started with door opened? YES</p> </div> <div data-bbox="1185 395 1327 443">  </div> <div data-bbox="1158 508 1337 541"> <p>Close the door</p> </div> <div data-bbox="1193 563 1295 657">  </div> <div data-bbox="759 519 802 552"> <p>NO</p> </div> <div data-bbox="499 618 1064 683"> <p>Visit to check</p> </div> <div data-bbox="572 701 986 738"> <p>< Check if the door switch is O.K. ></p> </div>
<ul style="list-style-type: none"> • DRAIN TROUBLE 	<div data-bbox="499 853 1064 919"> <p>Is " OE " displayed?</p> </div> <div data-bbox="1185 875 1327 923">  </div> <div data-bbox="751 930 810 963"> <p>YES</p> </div> <div data-bbox="499 995 1064 1094"> <p>Is the debris filter clogged with foreign material such as pin, coin and etc.?</p> </div> <div data-bbox="1046 1028 1106 1061"> <p>YES</p> </div> <div data-bbox="1129 1017 1246 1083"> <p>Clean up the filter.</p> </div> <div data-bbox="1265 974 1393 1120">  </div> <div data-bbox="759 1098 802 1131"> <p>NO</p> </div> <div data-bbox="499 1153 1064 1229"> <p>Is the drain hose frozen with water, kinked or crushed?</p> </div> <div data-bbox="759 1229 802 1262"> <p>NO</p> </div> <div data-bbox="499 1290 1064 1356"> <p>Visit to check</p> </div> <div data-bbox="1129 1131 1337 1295">  </div>
<ul style="list-style-type: none"> • POWER FAILURE 	<p>Restart the cycle</p>

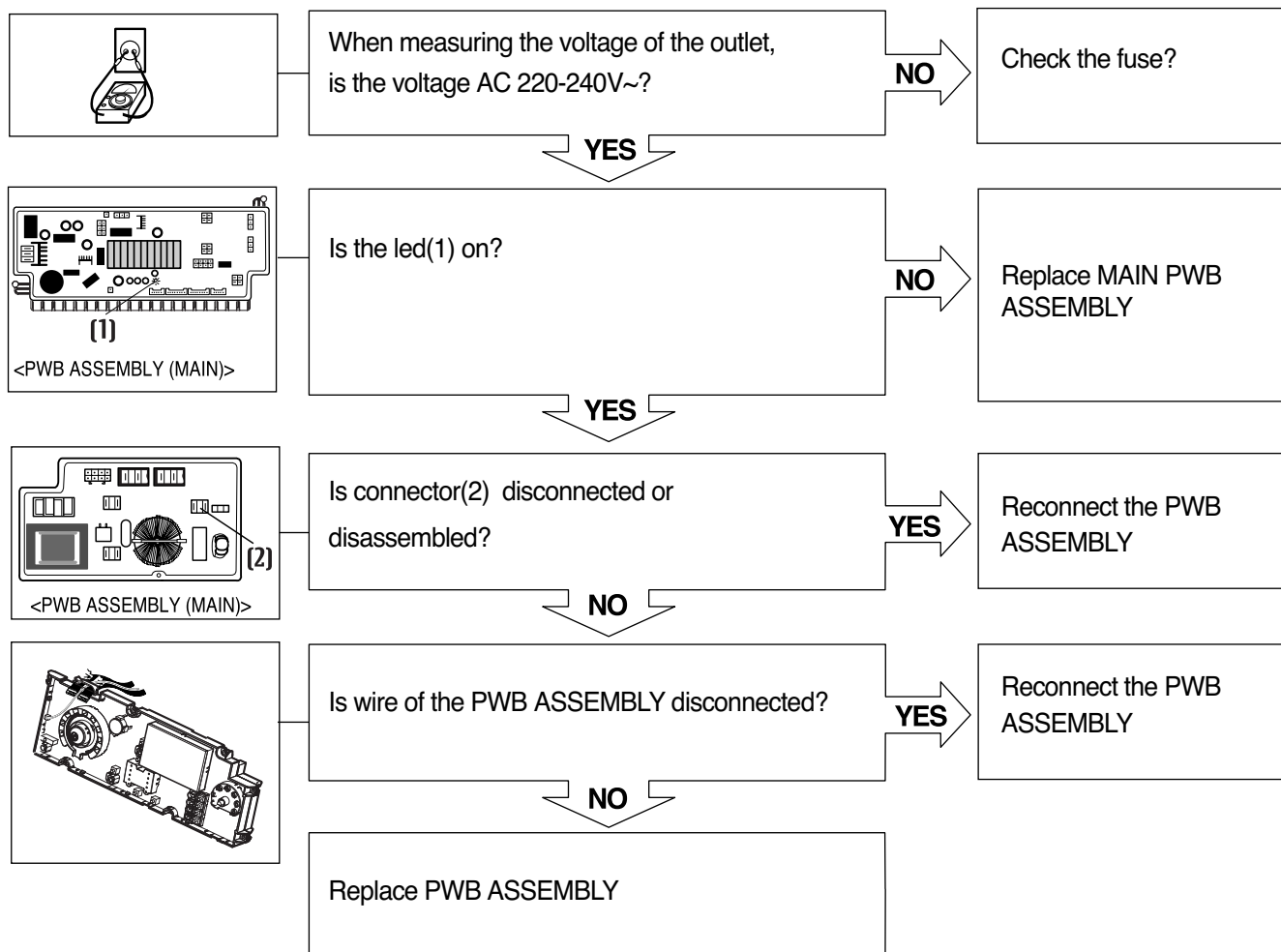
SYMPTOM	GUIDE FOR SERVICE CALL
<p>◦ Suds overflow from the appliance. (In this condition, wash and spin do not operate normally)</p>	<div data-bbox="526 327 1085 425">Is low-sudsing detergent for the drum washing machine used?</div> <div data-bbox="734 425 877 469">YES</div> <div data-bbox="526 480 1085 578">Is the proper amount of detergent used as recommended?</div> <div data-bbox="734 578 877 622">YES</div> <div data-bbox="526 633 1085 731">Recommend to reduce the using amount of detergent.</div> <div data-bbox="558 731 1276 939"> <ul style="list-style-type: none"> * This appliance has the automatic suds sensing function which operates under much suds condition for good rinse and preventing overflow. * When much suds are sensed, suds removing function such as drain, water input and pause will operate without rotating the drum. </div> <div data-bbox="1141 338 1340 513">  <p>LOW-SUDSING</p> </div>
<p>◦ No effect of softener</p>	<div data-bbox="526 1004 1085 1102">Is softener put in the correct compartment of the drawer?</div> <div data-bbox="734 1102 877 1146">YES</div> <div data-bbox="526 1157 1085 1233">Is the drawer closed during wash?</div> <div data-bbox="734 1233 877 1277">YES</div> <div data-bbox="526 1288 1085 1365">Is the softener cap clogged?</div> <div data-bbox="734 1365 877 1408">YES</div> <div data-bbox="526 1408 1085 1474">Explain how to use softener</div> <div data-bbox="558 1485 1037 1528">< Clean the compartment for softener ></div> <div data-bbox="1085 1026 1372 1386">  <p>Detergent for main wash (\\I/)</p> <p>Fabric softener (\\8/)</p> <p>Detergent for pre wash (\\I/)</p> </div>
<div data-bbox="127 1583 462 1779">  </div>	<div data-bbox="526 1627 1085 1692">Visit to check</div>

8-2.FAULT DIAGNOSIS AND TROUBLE SHOOTING

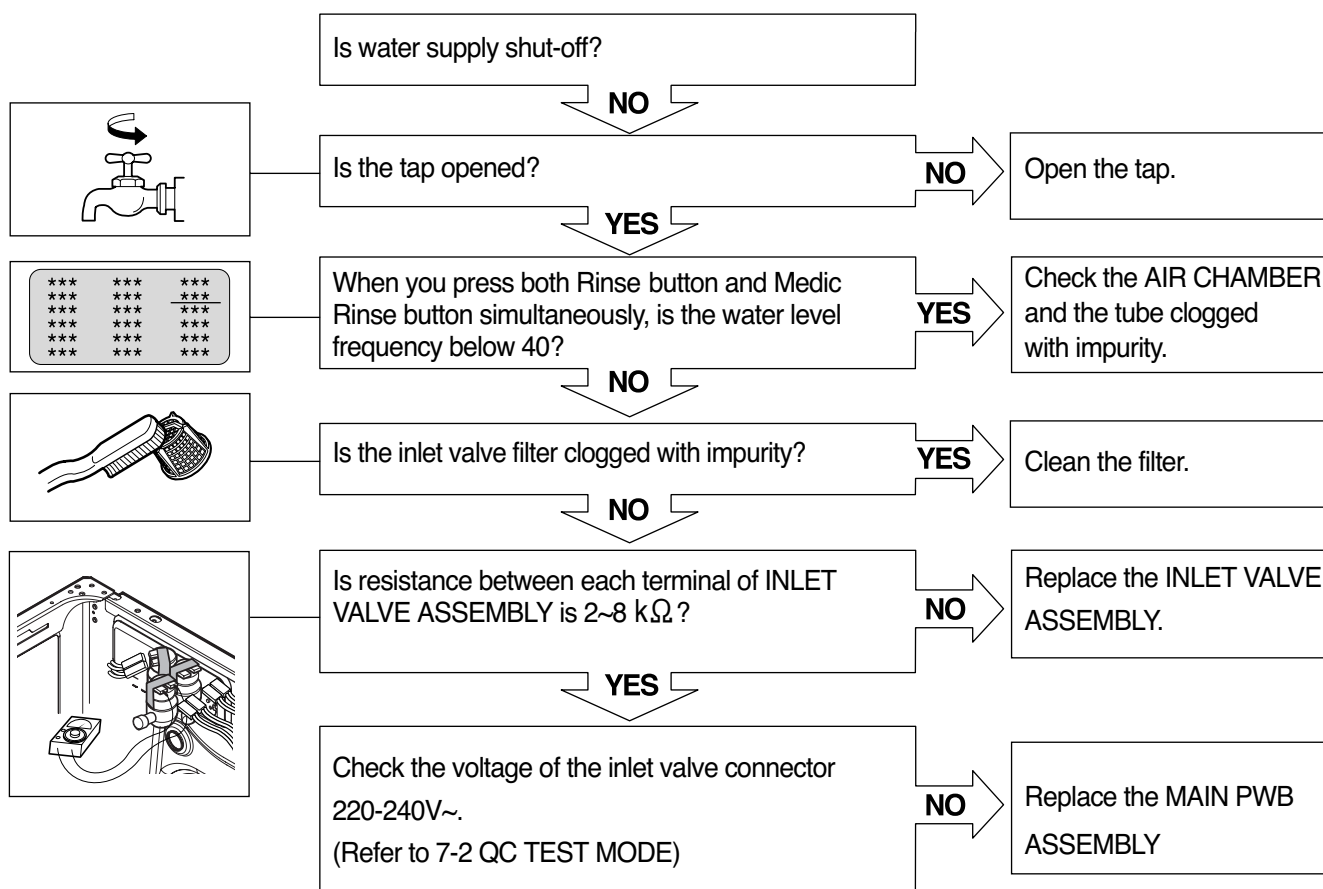
CAUTION

1. Be careful of electric shock or disconnecting the parts while trouble shooting.
2. First of all, check the connection of each part terminal with wiring diagram.
3. If you replace the MAIN PWB ASSEMBLY, Put in the connectors correctly.

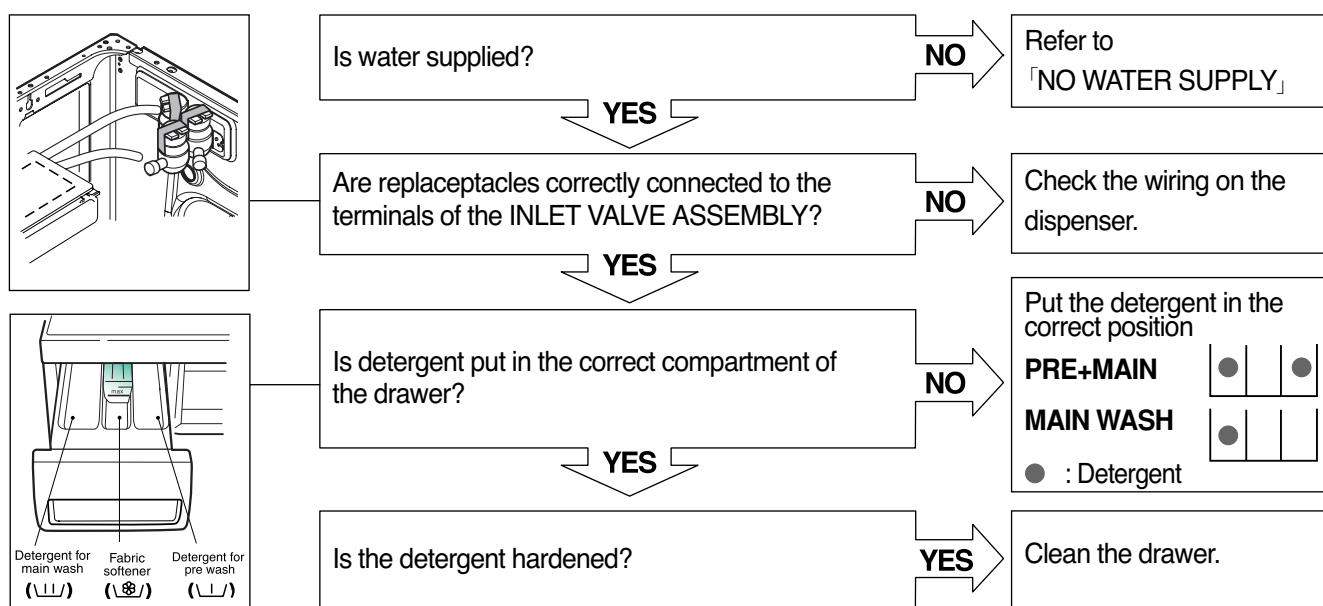
NO POWER



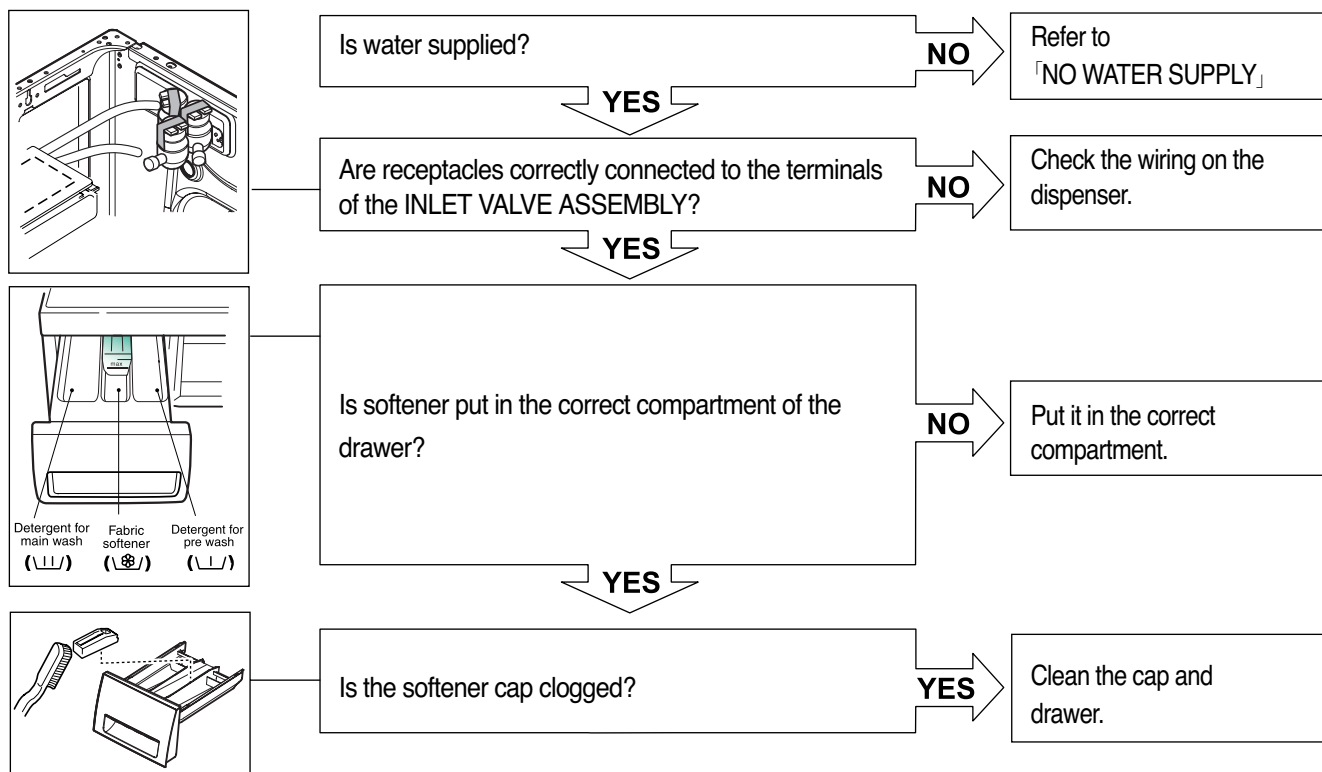
NO WATER SUPPLY



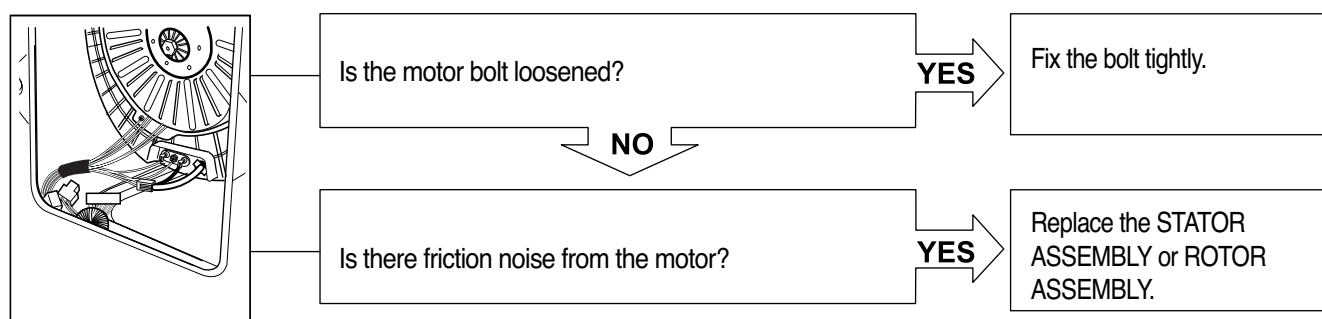
DETERGENT DOES NOT FLOW IN



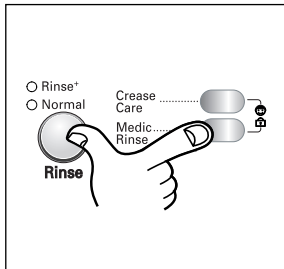
SOFTENER DOES NOT FLOW IN



ABNORMAL SOUND



HEATING WITHOUT WATER

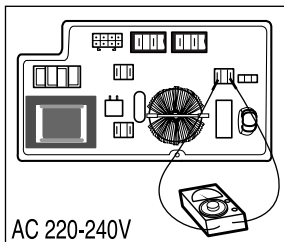


When pressing Rinse and Medic Rinse at the same time after draining, is the water level frequency 248 ~ 262 or more?
When pressing Rinse and Temp. buttons at the same time while wash, is the water level frequency between 230 - 243?

NO

Replace the S.PRESSURE SWITCH ASSEMBLY

YES

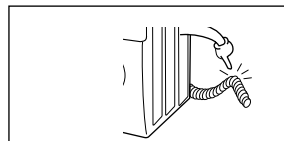


Checking voltage between two pins as press the POWER button is the voltage 220-240V~?

YES

Replace the MAIN PWB ASSEMBLY

DRAIN MALFUNCTIONING

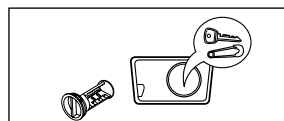


Is the drain hose twisted or frozen?

YES

Repair the DRAIN HOSE ASSEMBLY.

NO

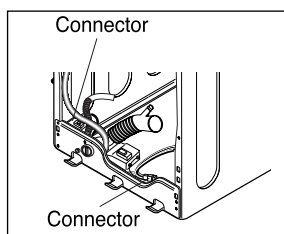


Is the impeller of the drain pump clogged?

YES

Remove foreign material.

NO



Is the connector disconnected, disassembled?

YES

Reconnect or repair the connector

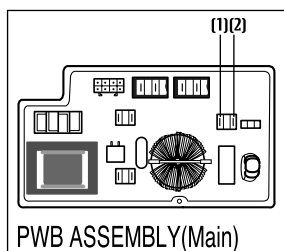
NO

Is the coil of the drain pump cut-off?
(resistance of coil is 80~150Ω)

YES

Repair the DRAIN PUMP ASSEMBLY.

NO

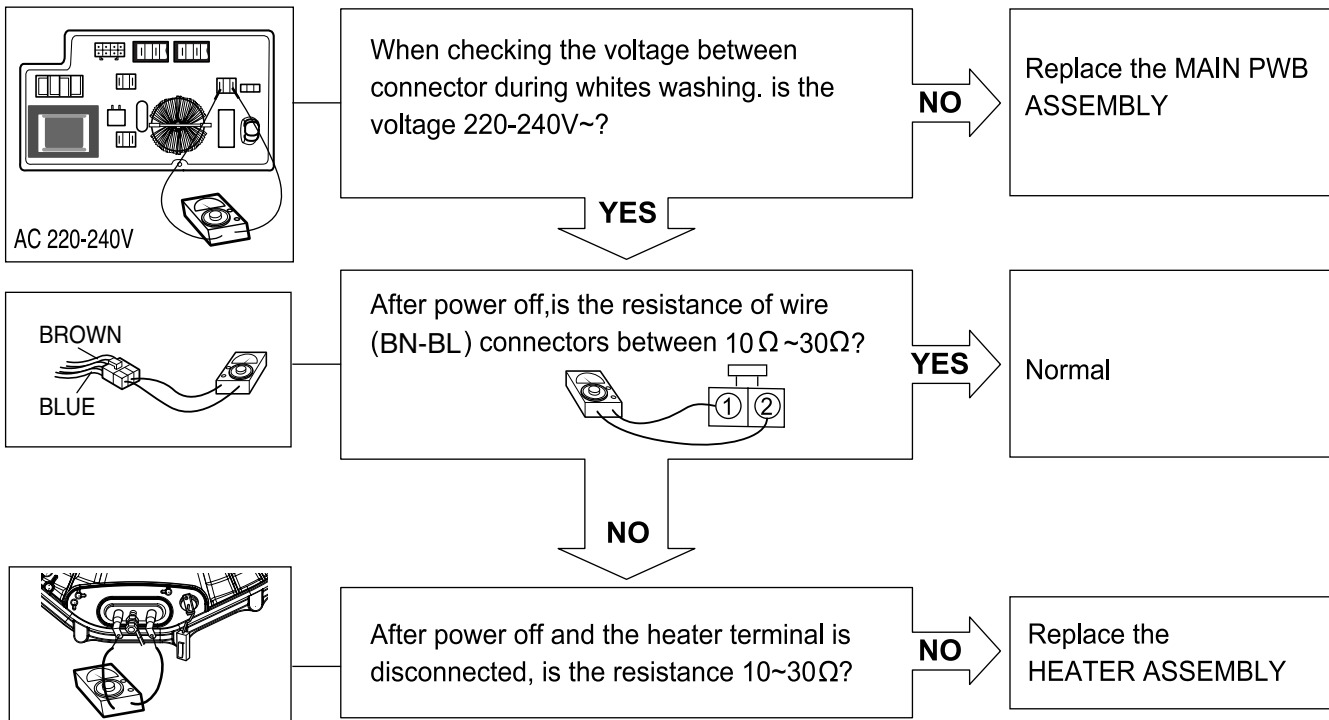


When checking voltage between connectors (①, ②) on spinning, is the voltage 220-240V~ as the figure?

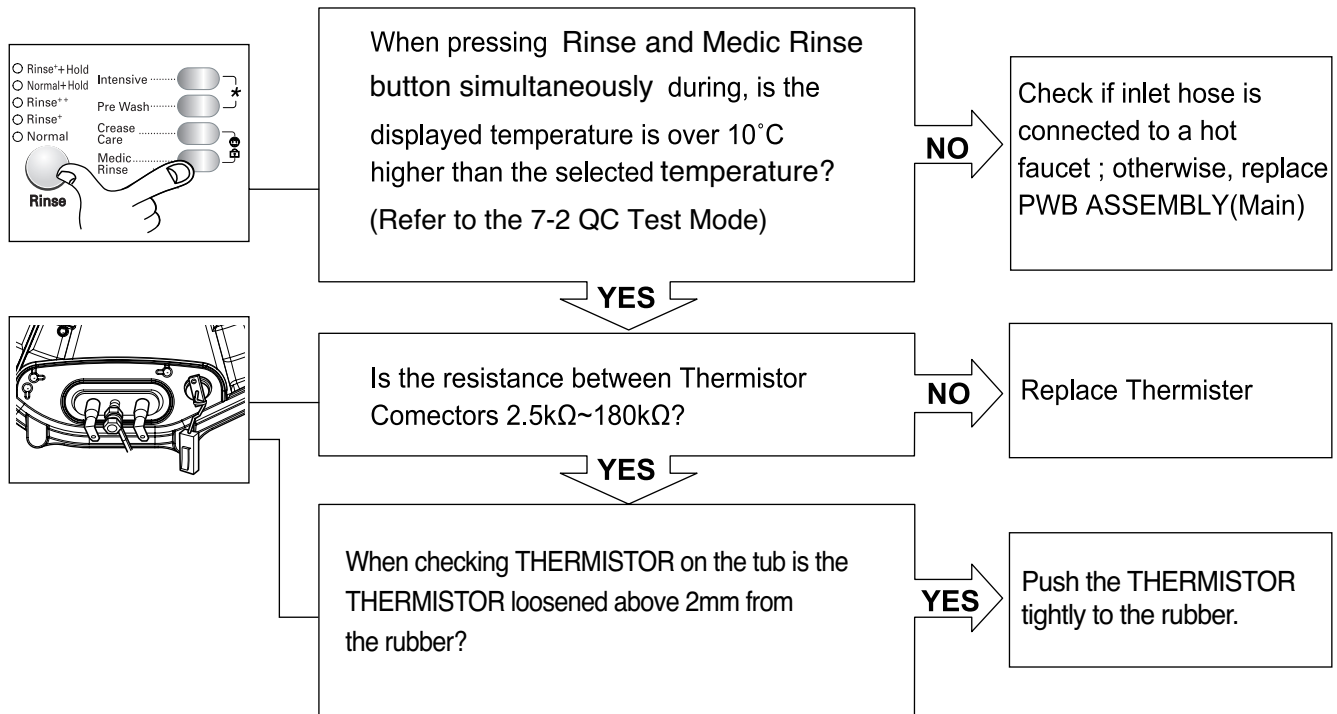
NO

Repair the MAIN PWB ASSEMBLY.

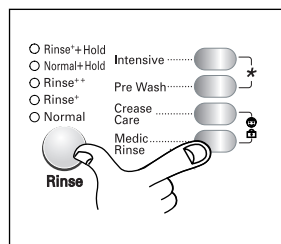
WASH HEATER TROUBLE



HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE



SPIN TROUBLE

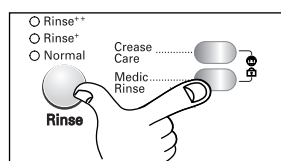


Check on the spinning, is the frequency of the water level 248 or more. The frequency can be checked by pressing the Rinse and Medic Rinse buttons at the same time on the program.

NO

Check the S.PRESSURE SWITCH ASSEMBLY or HOSE (Pressure). If the problem is on the S.PRESSURE SWITCH ASSEMBLY or the HOSE, replace the S.PRESSURE SWITCH ASSEMBLY or the HOSE.

YES

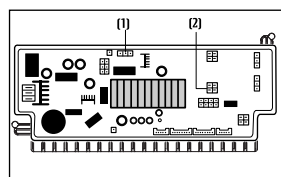


When pressing Rinse, Medic Rinse and POWER buttons at the same time after power off, press the Start/Pause button 1 times, is the drum low speed spin?

YES

Normal

NO

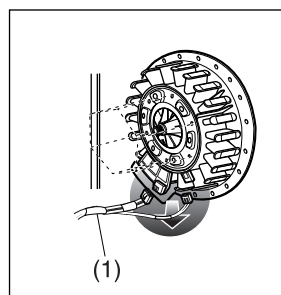


Is it disconnected, or disassembled?
[Red:3pin(1), GY:4pin(2)]

YES

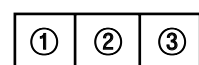
Correct the connector.

NO



Check the motor connector, is the resistance of the terminal same as the figure?

MOTOR TERMINAL (1)



Resistance of terminal:

①~② / ②~③ / ③~① : About 5Ω~15Ω

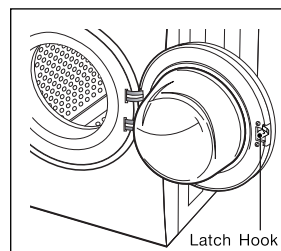
NO

Replace the STATOR ASSEMBLY

YES

Replace the MAIN PWB ASSEMBLY

DRAIN TROUBLE



Does the spring of Latch Hook actuate?

NO

Replace Door Assembly.

YES

Is there clicking sound once or twice when the **START/PAUSE** button is pressed to start the cycle?

NO

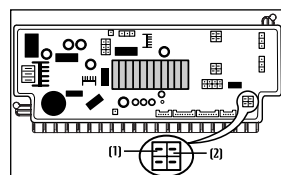
Check the DOOR SWITCH ASSEMBLY Connector and MAIN PWB ASSEMBLY [Black(1), Brown/Yellow(2)].

YES

Is DOOR SWITCH ASSEMBLY broken?

YES

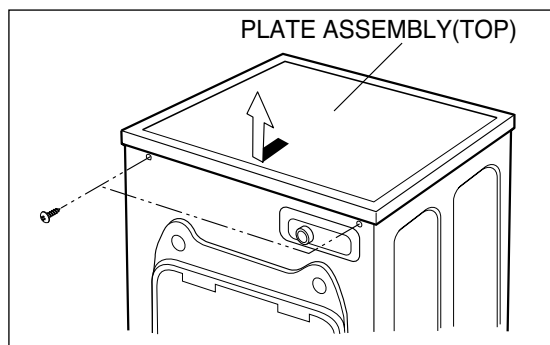
Replace the DOOR SWITCH ASSEMBLY.



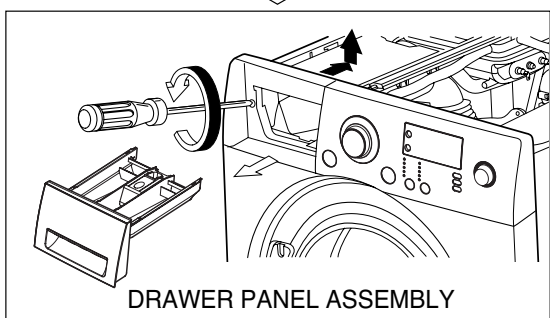
9. DISASSEMBLY INSTRUCTIONS

* Disassemble and repair the parts after pulling out power cord from the outlet.

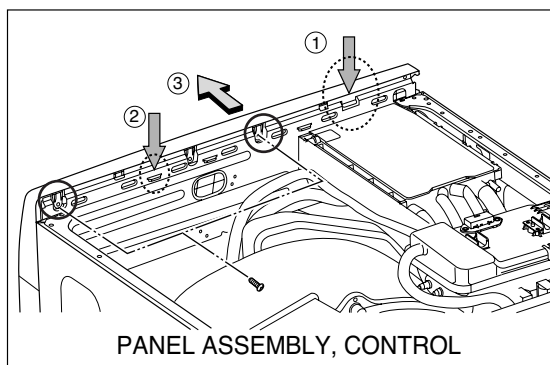
CONTROL PANEL



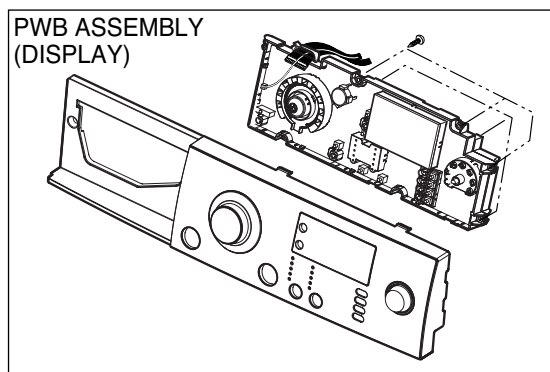
- ① Unscrew the screws on the top plate.
- ② The plate assembly(Top) is pulled back and then upward to arrow direction.
- ③ The cover(Inner) is disassembled.



- ① Pull out the drawer and unscrew 2 screws.
- ② Lift the side the Control Panel Assembly and pull it out

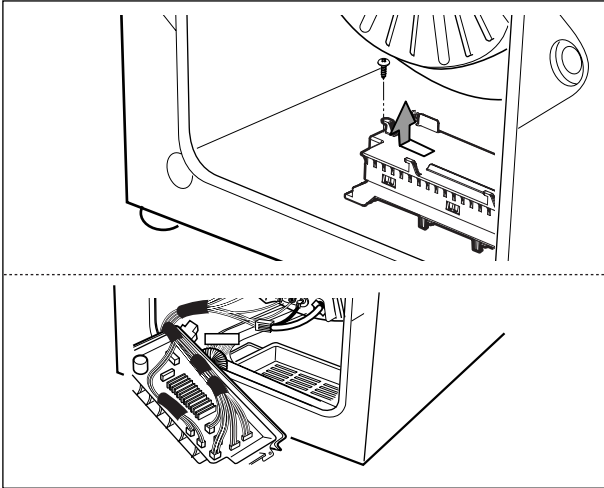


- ① Two screws is unscrewed.
- ② Push out PANEL ASSEMBLY,CONTROL after Push the hook(①, ②) below.



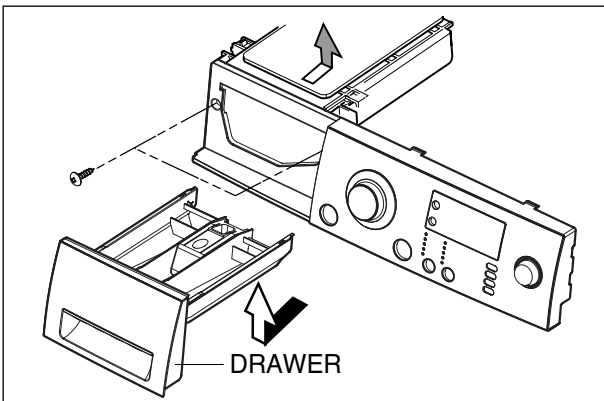
- ① The PWB assembly(Display) is disconnected.
- ② When 7 screws are unscrewed on the PWB insulator and the PWB assembly(Display) is disassembled from the PWB insulator.

PWB ASSEMBLY(MAIN)

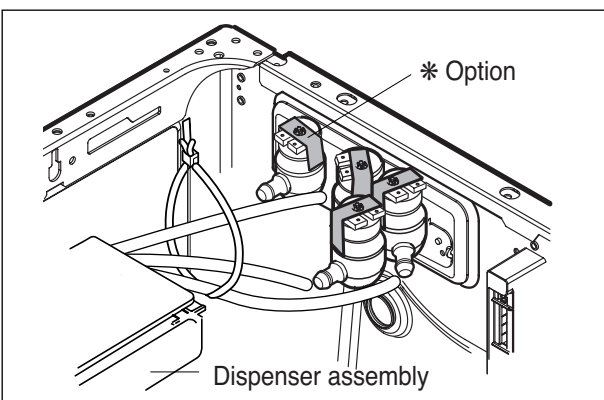


- ① The back cover is removed.
- ② One screw is unscrewed.
- ③ Pull the PWB assembly(Main) to arrow direction
- ④ Two screws is unscrewed.
- ⑤ The cover of PWB assembly(Main) is removed.
- ⑥ Disconnect connector from the wiring.

DISPENSER ASSEMBLY

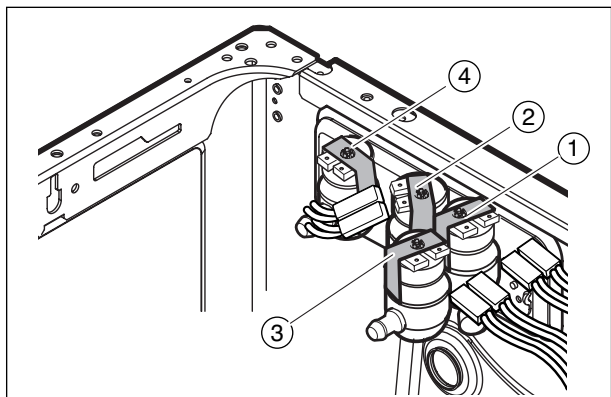


- ① The plate assembly(Top) are disassembled.
- ② Pull the drawer to arrow direction.
- ③ Two screws are unscrewed.



- ① The hose clamps and the hose are disassembled.
- ② The ventilation bellows are disassembled on the tub.

INLET VALVE

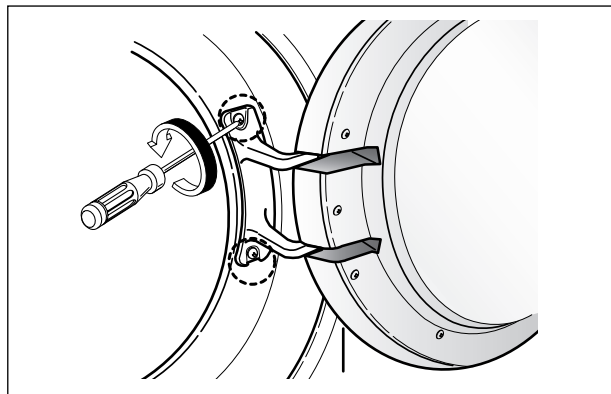


- ① Disconnect the wiring connector.
- ② Remove the valve by two screws of the valve holder.

* When reconnecting the connector

VALVE ① (STEAM)	VIOLET/BLACK-BLACK
VALVE ② (PRE-WASH)	WHITE/BLACK-BLACK
VALVE ③ (NORMAL-WASH)	GRAY/BLACK
VALVE ④ (HOT)	BLACK/WHITE

DOOR



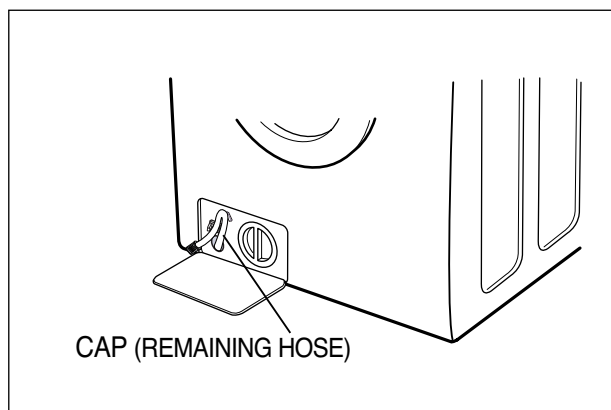
- ① Open the door completely.
- ② Remove the two screws from the hinge.

※ When removing the Door Assembly, it is necessary to hold the Bracket that is inner of the Cabinet Cover.

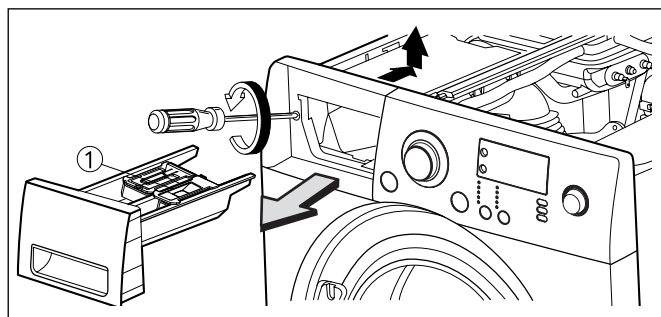
Removing method of remained water

Pull it out from hose.

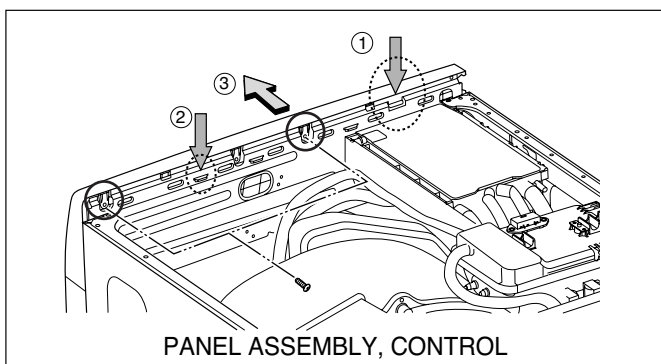
※ First, prepare a bucket to put in the remained water.



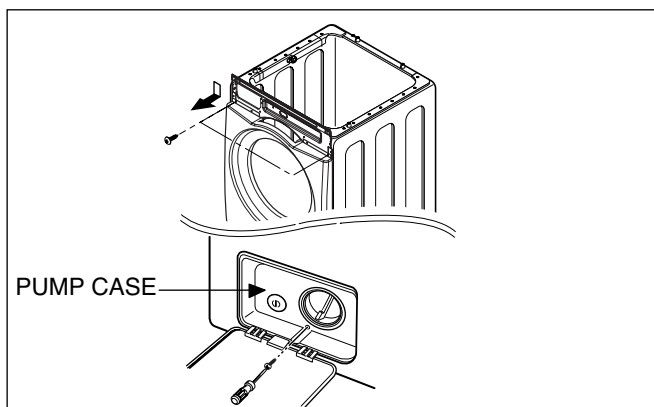
CABINET COVER



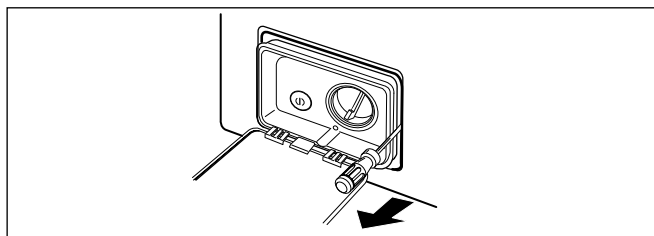
- ① Unscrew the 2 screws from the lower of the DECO PANEL.



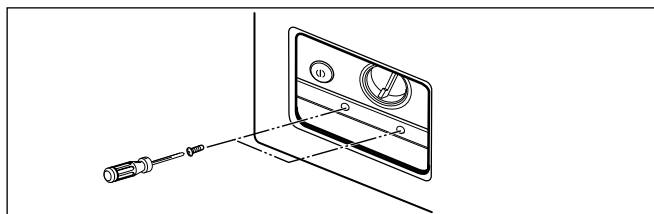
- ① Two screws is unscrewed.
- ② Push out PANEL ASSEMBLY,CONTROL after Push the hook(①, ②) below.



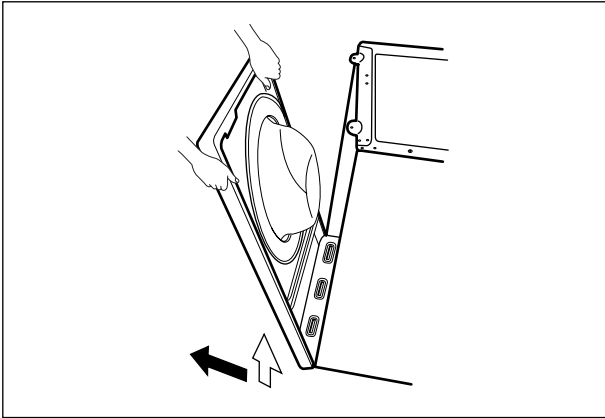
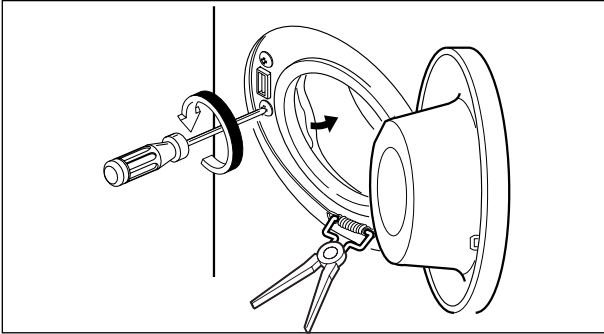
- ① Unscrew the 2 screws from upper of the canbinet cover.
- ② Unscrew the screw from the pump case.



- ① Put a flat (-) screwdriver or putty knife into the both sides of the pump case, and pull it out.



- ① Unscrew the screw from the lower side of the cabinet cover.

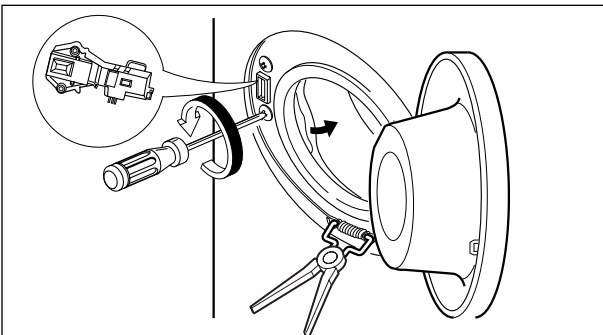


- ① The cabinet cover clamp is removed by special jig for service and the gasket is released.
- ② Two screws are unscrewed.

- ① Lift and separate the cabinet cover.

※ **NOTE:** When assembling the CABINET COVER, connect the Door S/W connector.

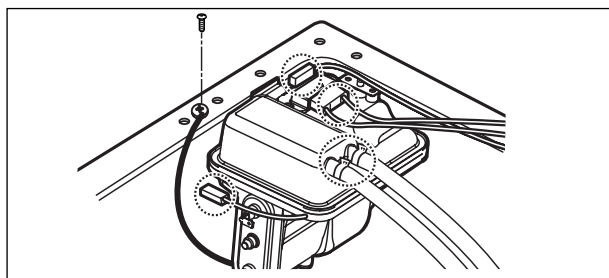
SWITCH ASSY, DOOR LOCK



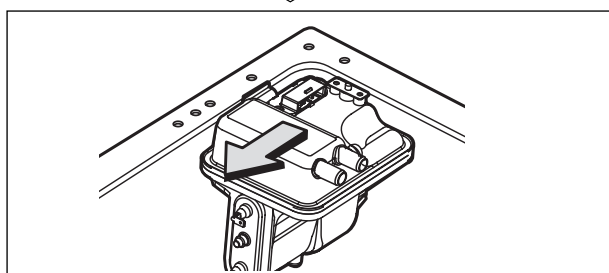
- ① The cabinet cover clamp is removed and the gasket is released.
- ② Two screws are unscrewed.
- ③ The Door Lock S/W is disconnected from the wiring connector and the strap.

TSG (TURBO STEAM GENERATOR)

[WD-*****FDS]

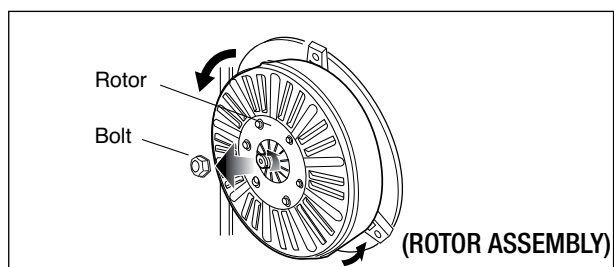


- ① Remove the housing coupled the TSG (Connector, Hoses, Earth Screw)

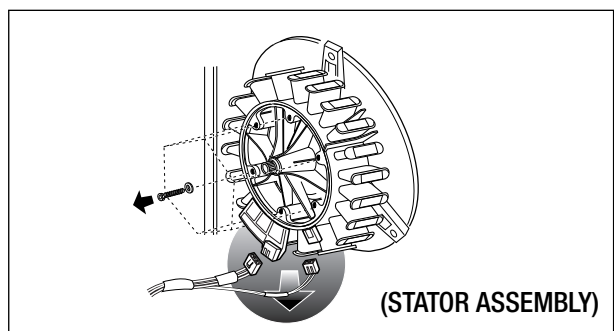


- ② Taking ou the screw of the TSG.

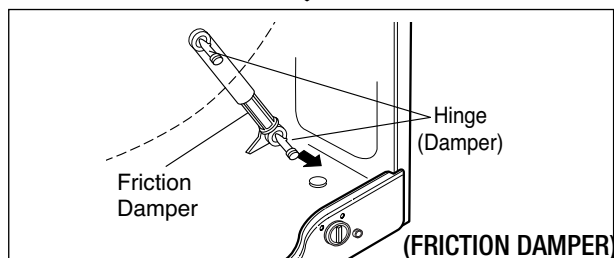
ROTOR ASSEMBLY, STATOR ASSEMBLY, FRICTION DAMPER



- ① Remove the back cover.
- ② After loosening the bolt, Rotor, pull out the rotor.

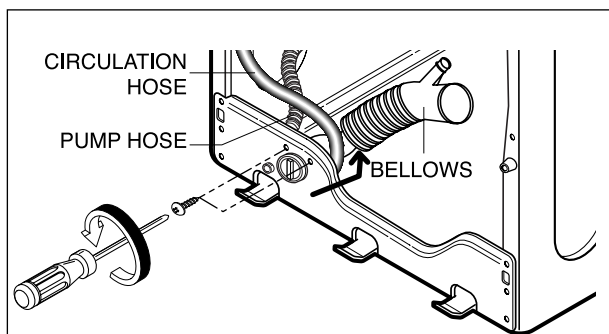


- ① Remove the 6 bolt from the stator.
- ② Disconnect the 2 connectors.



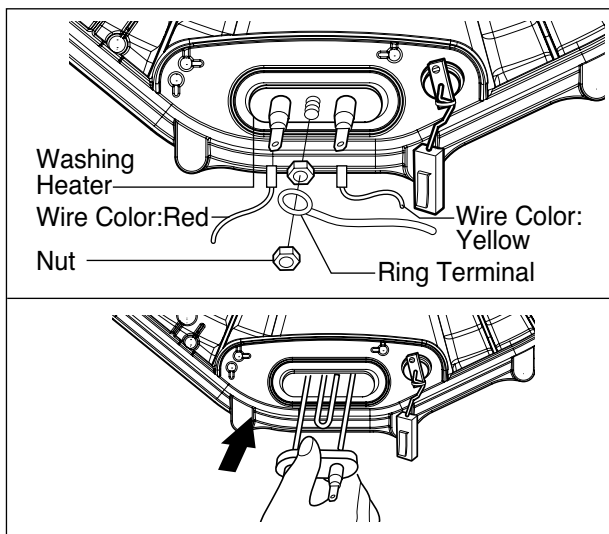
- ① Remove the hinges (Damper) at the Tub.
- ② The Hinge(Damper) at the base is pulled off pressing on the snaps at the sharp end.
- ③ The hinge at the base is pulled off. (To arrow direction)

PUMP



- ① Remove pump outlet hose.
- ② Remove tub pump bellows.
- ③ Remove cap(Remaining Hose).
- ④ Disconnect the wiring.
- ⑤ Three screws are unscrewed from the cabinet.
- ⑥ Remove the pump to arrow direction.

HEATER

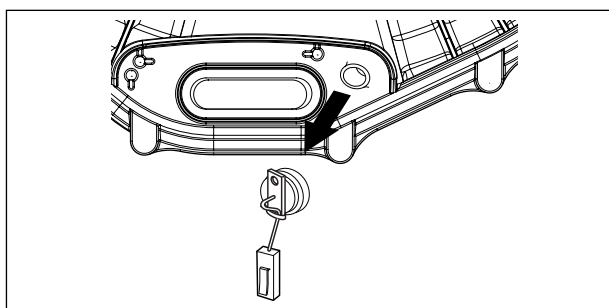


- ① Loosen the nut.
- ② Remove washing heater by pulling out.

CAUTION

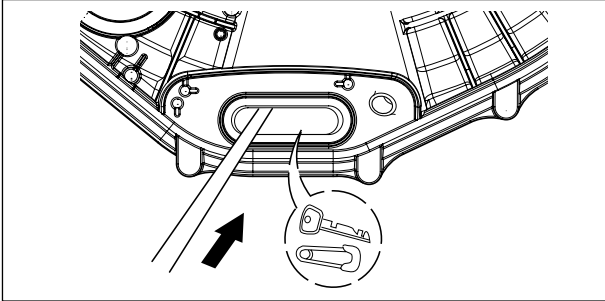
When assembling the washing heater, insert the heater to heater clip on the bottom of tub and check the position of wire color.

THERMISTOR



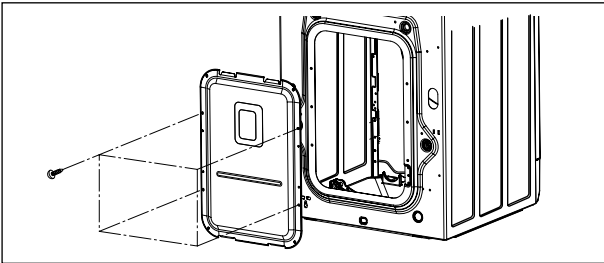
- ① Pull it out by holding the thermistor bracket.
- * If holding the wire and pulling out it, it may be broken.

WHEN FOREIGN OBJECT STUCK BETWEEN DRUM AND TUB

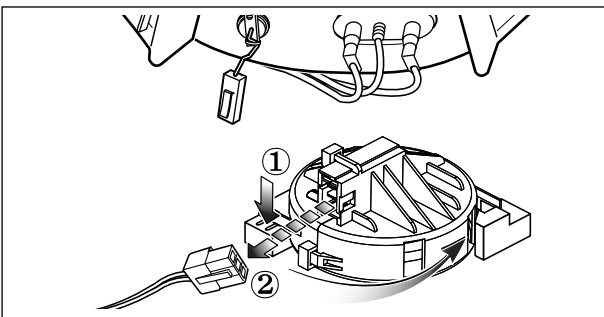


- ① Remove washing heater.
- ② Remove the foreign object(wire,coin,etc) by inserting long bar in the hole.

SWITCH ASSEMBLY, SAFETY



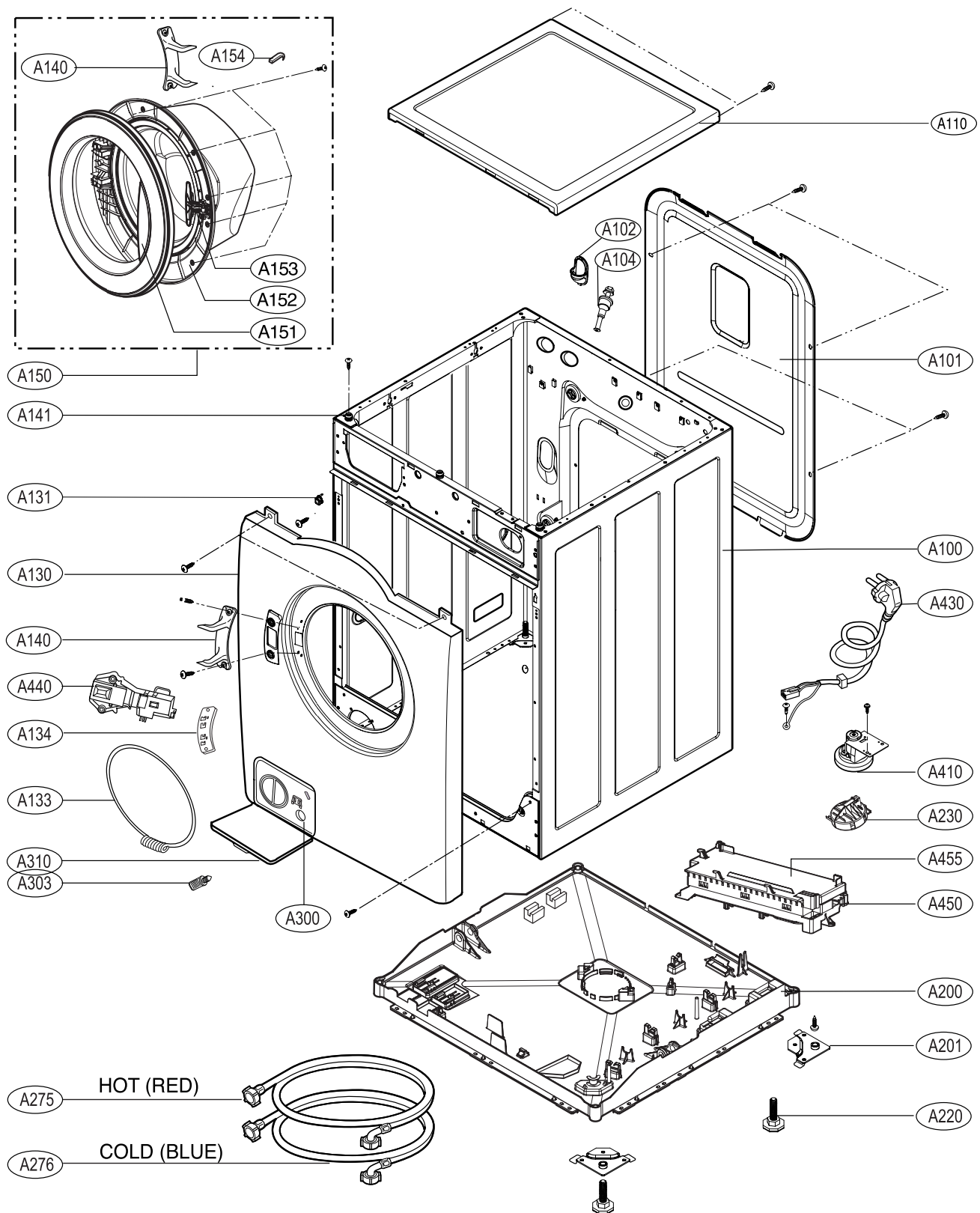
- ① Unscrew 4 screws from the back cover.



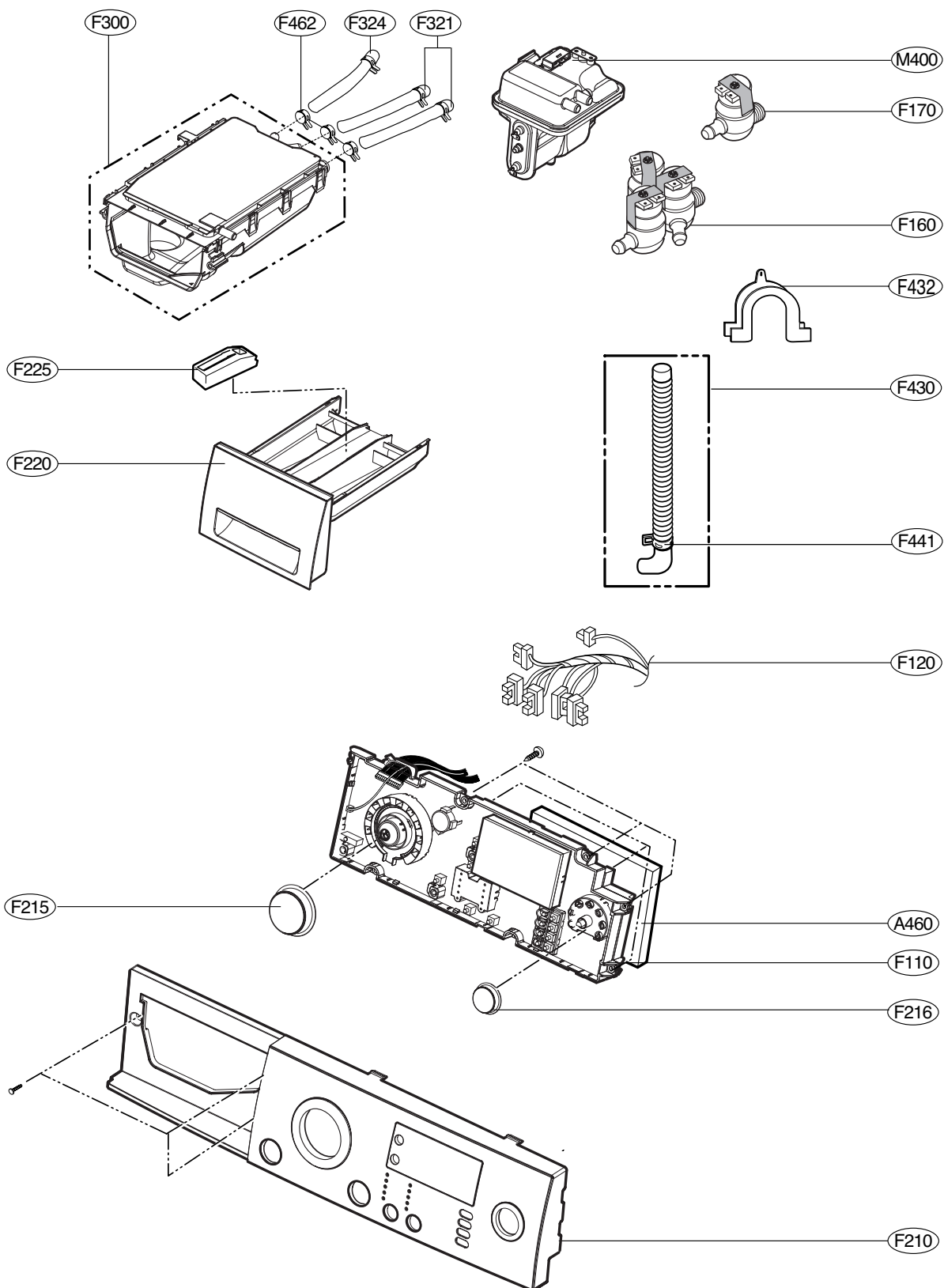
- ② Disconnect the wiring connector.
First, Press hook and turn the safety switch assembly switch assembly safety.

10. EXPLODED VIEW AND PART LIST

10-1.THE PART LIST OF CABINET ASSEMBLY



10-2 THE EXPLODED VIEW OF CONTROL PANEL & DISPENSER ASSEMBLY



[illegible]



Jul. 2006 PRINTED IN KOREA

P/No.: MFL30574714